

## Parents as Teachers

### Program description:

Parents as Teachers (<http://www.parentsasteachers.org/>) is a home visiting program for parents and children with a main goal of having children ready to learn by the time they go to school. Parents are visited monthly by parent educators with some college education. Visits typically begin during the mother's pregnancy and may continue until the child enters kindergarten.

Typical age of primary program participant: 20

Typical age of secondary program participant: N/A

### Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
						First time ES is estimated			Second time ES is estimated		
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
High school graduation	P	1	-0.02	0.19	0.93	-0.02	0.19	22	-0.02	0.19	22
Repeat teen birth	P	1	0.09	0.22	0.68	0.09	0.22	22	0.09	0.22	22
Test scores	S	5	0.11	0.08	0.15	0.07	0.08	4	0.04	0.04	17
Child abuse and neglect	S	1	-0.38	0.54	0.48	-0.38	0.54	3	-0.38	0.54	13

### Benefit-Cost Summary

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.	Program Benefits					Costs	Summary Statistics			
	Partici-pants	Tax-payers	Other	Other Indirect	Total Benefits		Benefit to Cost Ratio	Return on Investment	Benefits Minus Costs	Probability of a positive net present value
	\$2,918	\$1,116	\$412	\$546	\$4,992		\$1.18	3%	\$765	57%

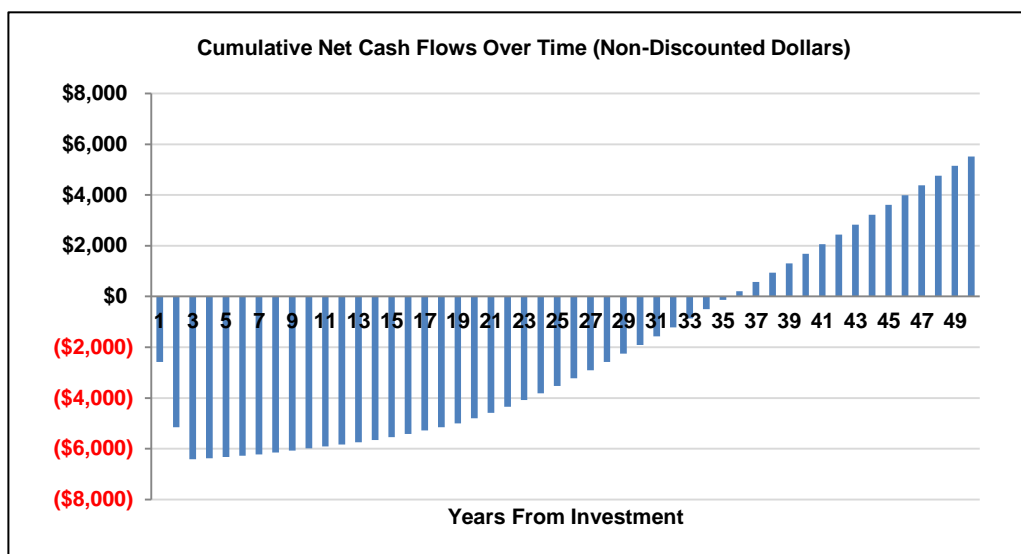
### Detailed Monetary Benefit Estimates

Source of Benefits	Benefits to:				
	Partici-pants	Tax-payers	Other	Other In-direct	Total Benefits
<b>From Secondary Participant</b>					
Crime	\$0	\$151	\$417	\$75	\$643
Earnings via test scores	\$2,121	\$781	\$0	\$381	\$3,283
Child abuse and neglect	\$796	\$129	\$0	\$63	\$988
K-12 special education	\$0	\$26	\$0	\$12	\$39
Health care costs for alcohol disorder	\$0	\$1	\$1	\$0	\$2
Health care costs for illicit drug disorder	\$0	\$2	\$1	\$1	\$4
Property loss from illicit drug disorder	\$0	\$0	\$1	\$0	\$1
Health care costs via depressive disorder	\$2	\$7	\$7	\$4	\$21
Health care costs via education	-\$2	\$19	-\$14	\$10	\$12

### Detailed Cost Estimates

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.	Program Costs			Comparison Costs			Summary Statistics	
	Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or - %)
	\$1,450	3	2003	\$0	3	2003	\$4,236	10%

Source: Average annual cost provided by Parents as Teachers National Center in 2003. Average length of program estimated by WSIPP.



### Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	0.5
2- Well-implemented comparison group design, often with many statistical controls.	0.5
3- Well-done observational study with many statistical controls (e.g., IV, regression discontinuity).	0.81
4- Random assignment, with some RA implementation issues.	0.81
5- Well-done random assignment study.	1.00
Program developer = researcher	0.25
Unusual (not "real world") setting	0.5
Weak measurement used	0.54

The adjustment factors for these studies are based on a multivariate regression analysis of 106 effect sizes from evaluations of home visiting programs within child welfare or at-risk populations. The analysis examined the relative magnitude of effect sizes for studies rated a 1, 2, 3, or 4 research design quality, in comparison with a 5 (see Technical Appendix II for a description of these ratings). We weighted the model using the random effects inverse variance weights for each effect size. The results indicated that research designs 1 and 2 have effect sizes about twice the size of studies rated as a 5, and research designs 3 and 4 have effect sizes about 24 percent higher than a 5.

The analysis also found that effect sizes were statistically significantly higher when the program developer was involved in the research evaluation, or when a weak outcome measure was used.

### Studies Used in the Meta-Analysis

- Drotar, D., Robinson, J., Jeavons, L., & Kirchner, H. L. (2009). A randomized, controlled evaluation of early intervention: The Born to Learn curriculum. *Child: Care, Health & Development*, 35(5), 643-649.
- Pfannenstiel, J. C., & Seltzer, D. A. (1989). New parents as teachers: Evaluation of an early parent education program. *Early Childhood Research Quarterly*, 4(1), 1-18.
- Wagner, M. M., & Clayton, S. L. (1999). The Parents as Teachers program: Results from two demonstrations. *The Future of Children*, 9(1), 91-115.
- Wagner, M., Cameto, R., & Gerlach-Downie, S. (1996, March). *Intervention in support of adolescent parents and their children: A final report on the Teen Parents as Teachers Demonstration*. Menlo Park, CA: SRI International.
- Wagner, M., Spiker, D. (with Hernandez, F., Song, J., & Gerlach-Downie, S.). (2001, June). *Multisite Parents as Teachers evaluation: Experiences and outcomes for children and families* (SRI Project P07283). Menlo Park, CA: SRI International.